What is claimed is:

1. A method of moving a valve from a first stationary position to a second stationary position, comprising:

providing a valve and a valve seat against which said valve is adapted to be sealed, said valve having a drive shaft;

causing said valve to seal against said valve seat by forcing said valve towards said valve seat when said valve is in said first stationary position;

reducing the effect of said force in an amount sufficient to break said seal;

moving said valve to said second stationary position; and

restoring the effect of said force to cause said valve to seal against said valve seat when said valve is in said second stationary position.

2. The method of claim 1, wherein the effect of said force is reduced by applying a counter-force to said valve.

3. The method of claim 2, wherein said force and said counter-force are supplied with pressurized air.

4. The method of claim 2, wherein said valve seat has an annular groove, and wherein said counter-force is applied by supplying pressurized air to said groove.

5. The method of claim 1, wherein said force is

applied with an electromagnet drawing said valve towards said valve seat, and wherein the effect of said force is reduced by de-energizing said electromagnet.

6. A system for reducing friction during movement of a valve, comprising:

a flow distributor;

a valve seat;

a drive associated with said flow distributor for moving said flow distributor from a first stationary position to a second stationary position;

a source of compressed gas in fluid communication with said flow distributor;

a first regulator for supplying said compressed gas to said flow distributor at a first pressure sufficient to seal said flow distributor against said valve seat when said flow distributor is in either said first or said second stationary position; and

a second regulator for supplying said compressed gas to said flow distributor at a second pressure less than said first pressure when said flow distributor moves between said first and second stationary positions.

7. The system of claim 6, further comprising a solenoid in communication with said first and second regulators for alternating which said regulator supplies

said compressed gas to said flow distributor.

8. The system of claim 7, further comprising a dump valve downstream of said solenoid for selectively preventing the flow of compressed air to said flow distributor.

9. The system of claim 6, wherein said drive comprises a hollow drive shaft, and wherein said compressed air is in fluid communication with said flow distributor through said hollow drive shaft.

10. The system of claim 6, wherein said flow distributor comprises a top surface having a plurality of apertures, and wherein said seal is formed by said compressed air flowing out said apertures and creating an air cushion between said top surface and said valve seat.

11. A method of moving a valve from a first stationary position to a second stationary position, comprising:

providing a valve and a valve seat against which said valve is adapted to be sealed;

providing a supply of compressed gas;

biasing said valve against said valve seat to seal said valve when said valve is in said first stationary position by supplying to said valve said compressed gas at a first pressure sufficient to create said seal;

breaking said seal by supplying said compressed gas to

said valve at a second pressure less than said first pressure;

moving said valve to said second stationary position; and

biasing said valve against said valve seat to seal said valve when said valve is in said second stationary position by supplying to said valve said compressed gas at a third pressure sufficient to create said seal.

12. The method of claim 11, wherein said first and third pressure are about the same.

13. The method of claim 11, wherein said valve comprises a hollow drive shaft, and wherein said compressed air is supplied to said valve through said hollow drive shaft.

14. The method of claim 11, wherein said valve comprises a top surface having a plurality of apertures, and wherein said seal is formed by said compressed air flowing out said apertures and creating an air cushion between said top surface and said valve seat.

15. A system for reducing friction during movement of a valve, comprising:

a flow distributor;

a valve seat;

a drive associated with said flow distributor for moving said flow distributor from a first stationary

position to a second stationary position;

a source of compressed gas in fluid communication with said flow distributor;

a pressure regulator for supplying said compressed gas to said flow distributor at a first pressure sufficient to seal said flow distributor against said valve seat when said flow distributor is in either said first or said second stationary position and for supplying said compressed gas to said flow distributor at a second pressure less than said first pressure when said flow distributor moves between said first and second stationary positions.

16. A regenerative thermal oxidizer for processing a gas, comprising:

a combustion zone;

an exhaust;

a first heat exchange bed containing heat exchange media and in communication with said combustion zone and with said exhaust;

a second heat exchange bed containing heat exchange media and in communication with said combustion zone and with said exhaust;

at least one valve for alternating between a first stationary mode allowing the flow of said gas into said first heat exchange bed, a moving mode, and a second stationary

mode allowing the flow of gas into said second heat exchange bed, said valve comprising a valve drive and a valve seat;

means for sealing said valve against said valve seat when said valve is in said first or second stationary mode; and

means for unsealing said valve when said valve is in said moving mode.

17. The regenerative thermal oxidizer of claim 16, wherein said means for sealing said valve comprising supplying compressed gas through said valve at a first pressure sufficient to form a cushion of air between said valve and said valve seat.

18. The regenerative thermal oxidizer of claim 17, wherein said means for unsealing said valve comprises supplying compressed gas to said valve at a second pressure less than said first pressure.

19. The regenerative thermal oxidizer of claim 16, wherein said means for sealing said valve comprises providing a force against said valve to cause said valve to be in sealing relation with said valve seat, and wherein said means for unsealing said valve comprises providing a counter-force opposing said force.

20. The regenerative thermal oxidizer of claim 19,

wherein said force is applied by supplying compressed gas through said shaft at a first pressure, and wherein said counter-force is applied by supplying compressed air at a second pressure to oppose said force in amount sufficient to break said seal.

21. The regenerative thermal oxidizer of claim 16, wherein said valve is a poppet valve.

22. The regenerative thermal oxidizer of claim 21, further comprising at least one delivery conduit valve for controlling the flow of sealing gas to said sealing interface based upon the position of said poppet valve.

23. The regenerative thermal oxidizer of claim 16, wherein said valve is a butterfly valve.